

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

Claim 1. (original) A method for decomposing a halogenated hydrocarbon gas comprising the steps of:

supporting a catalyst for decomposing the halogenated hydrocarbon gas on a carrier which is electrically conductive and resistant to a halogen-containing gas; and

passing the gas containing the halogenated hydrocarbon through the carrier to decompose the halogenated hydrocarbon gas, while heating the carrier by an electromagnetic induction heating.

Claim 2. (original) The method of claim 1, wherein the carrier comprises at least one material selected from the group consisting of SiC and stainless steel.

Claim 3. (original) The method of claim 1, wherein the catalyst comprises at least one element selected from the group consisting of Pt, Pd, Au, Rh, and Ni.

Claim 4. (original) The method of claim 1, wherein the catalyst comprises at least one element selected from the group consisting of W, Cr, Fe, Mo, and V.

Claim 5. (previously presented) The method of claim 1, wherein the catalyst comprises (i) titania; (ii) at least one element selected from the group consisting of Pt, Pd, Au, Rh, and Ni; and (iii) at least one element selected from the group consisting of W, Cr, Fe, Mo, and V.

Claim 6. (previously presented) The method of claim 1, wherein the catalyst comprises (i) titania and (ii) at least one element selected from the group consisting of Pt, Pd, Au, Rh, and Ni.

Claim 7. (previously presented) The method of claim 1, wherein the catalyst comprises (i) titania and (ii) at least one element selected from the group consisting of W, Cr, Fe, Mo, and V.

Claim 8. (canceled)

Claim 9. (canceled)

Claim 10. (canceled)

Claim 11. (canceled)

Claim 12. (previously presented) The method of claim 1,
wherein the carrier is made of a carbon ceramic.

Claim 13. (previously presented) The method of claim 12,
wherein the carbon ceramic is SiC.

Claim 14. (previously presented) The method of claim 13,
wherein the carrier is in the shape of a honeycomb.

Claim 15. (previously presented) The method of claim 1,
wherein the halogenated hydrocarbon gas is decomposed at a
temperature of 200 to 800°C.

Claim 16. (previously presented) The method of claim 15,
wherein the temperature is 300 to 500°C.

Claim 17. (previously presented) The method of claim 16, wherein the catalyst is Pt-WO₃-TiO₂.

Claim 18. (previously presented) The method of claim 1, wherein dioxins are not generated; and the heating is uniform.

Claim 19. (previously presented) A method for decomposing a halogenated hydrocarbon gas comprising the step of:

passing a halogenated hydrocarbon containing gas through a heating body which is electrically conductive and resistant to a halogen-containing gas to decompose the halogenated hydrocarbon gas, while heating the heating body by an electromagnetic induction heating, wherein the heating body is made of SiC.

Claim 20. (canceled)

Claim 21. (new) The method of claim 1, wherein a flue gas from the method has a dioxin concentration of 0.1 ng-TEQ/Nm³ or less.

Claim 22. (new) The method of claim 1, wherein the catalyst is selected from the group consisting of 0.5 wt% Pt-10 wt.% WO_3/TiO_2 , 2.0 wt% Pt-10 wt.% WO_3/TiO_2 , 0.5 wt.% Pt-5wt.% WO_3/TiO_2 , 0.5 wt.% Pt-20 wt.% WO_3/TiO_2 , 2.0 wt.% Pt-40 wt.% WO_3/TiO_2 , 0.1 wt.% Pt-10 wt.% WO_3/TiO_2 , 6.0 wt.% Pt-10 wt.% WO_3/TiO_2 , 0.5 wt.% Pd-10 wt.% WO_3/TiO_2 and 0.5 wt.% Au-10 wt.% WO_3/TiO_2 .